CHAPTER II
REVIEW OF RELATED LITERATURE

The second chapter is basically devoted to review the existing scholarship in the field. For the purpose of review, the researcher has affected a three way classification of existing materials based on the three variables, physical, physiological and psychological aspects. The investigator has reviewed in detail the literature available in the libraries of the department of physical education and sports sciences, Annamalai University, Central library, Annamalai University, Annamalainagar, Lakshmi Bai National College of Physical Education, Trivandrum, Dr. Sivanthi Aditanar College of Physical Education, Trichy, British Library, Trivandrum, YMCA College of Physical Education, Madras. The collection of materials has also been done by using internet facilities in a large scale.

Stress

Ching Li Gwendoline Tan-Kuick and Yong Ngee Keith Ng (2010): the investigator study the influences on Students’ Choice of Nursing Education in Singapore - An Exploratory Study Purpose The purpose of this paper is to propose a theoretical model amalgamating the factors that influence students’ choice in choosing nursing education as their tertiary study in Singapore. The approach taken to construct the theoretical model is to review extant literature that influence different facets of the students’ decision making process in selecting a nursing study. The findings indicated that the factors influencing students’ choices in selecting a nursing study are (i) education and career aspirations (includes student’s belief that nursing is the choice of career or education, student’s belief that there is advancement in nursing career or education), (ii) personal ability (includes stress management, motivation, perseverance and self-confidence), (iii) socio-
economic status (includes job security, images, sexual stereotypes and monetary reward) and (iv) parental and peer encouragement (parental and peer perceptions and support).

**Joseph E. Agolla and Henry Ongori (2009):** This research finding is based on the responses obtained from the undergraduate students at a higher learning institution (University) in Botswana. This paper investigated the stressors, symptoms and effects that are likely to be experienced by the undergraduate students in higher institutions (Universities). Stressors related to time, academic pressure, and academic environments were explored. A total of 320 students participated in this study. Data was collected through self administered questionnaires that were randomly distributed to the students during lecture time. Data obtained was analysed using descriptive statistics and Tables. The open ended question was thematically analysed and the result was found out that, academic workload, inadequate resources, low motivation, and poor performance in academic, continuous poor performance in academic, overcrowded lecture halls, and uncertainty of getting job after graduating from the university lead to stress among students. It is hoped that, these findings will help the individual students, lecturers, career and counseling centers, and the university administrators to put in place mechanisms that mitigate the effects of stress at the University. In addition, the finding will also spur a scholarly debate on academic stress among students in higher institutions. We therefore suggest that, other researchers should consider using triangulation method. The limitation of our study was the sample size and lack of geographical coverage since our study only concentrated on one university. Therefore, the findings of this study cannot be generalised and as such the researchers suggest.

**Babar t. Shaikh, et.al, (2004):** The investigator Assess the perception of stress amongst medical students and their coping strategies. A cross sectional study using a semi-structured self administered questionnaire was
carried out over four weeks, using a small sample of students of all categories and classes of a medical college. A total of 264 students out of 300 (88%) filled in the questionnaire. Inability to cope, helplessness, increased psychological pressure, mental tension and too much workload are ‘stress factors’ for students. A considerable majority (490%) think that they have been stressed at one time or another. Ninety-four per cent of males have experienced stress. The senior students of the fourth and final year feel more stressed (95% and 98% respectively). Low moods, inability to concentrate, loss of temper are most common symptoms. Females report more symptoms. Academics and exams are the most powerful stressors. Sports, music, hanging out with friends, sleeping or going into isolation are various coping mechanisms. Stress can affect the academic performance. If needed, students prefer to talk to a peer. They demand more recreational activities on campus, revised schedule of academics and exams, better counseling facilities and improvement in student-teacher relationship. It was concluded that the prevalence of perceived stress seems to be high among medical students, which tends to affect not only their academic performances but also all aspects of health. Review of academics and exam schedules, more leisure time activities, better interaction with the faculty and proper guidance, advisory services and peer counseling at the campus could do a lot to reduce the stress.

Mcvicar A. (2003): To identify nurses’ perceptions of workplace stress, consider the potential effectiveness of initiatives to reduce distress, and identify directions for future research. for this a literature search from January 1985 to April 2003 was conducted using the key words nursing, stress, distress, stress management, job satisfaction, staff turnover and coping to identify research on sources of stress in adult and child care nursing. Recent (post-1997) United Kingdom Department of Health documents and literature about the views of practitioners was also consulted. It was Found that
Workload, leadership/management style, professional conflict and emotional cost of caring have been the main sources of distress for nurses for many years, but there is disagreement as to the magnitude of their impact. Lack of reward and shift working may also now be displacing some of the other issues in order of ranking. Organizational interventions are targeted at most but not all of these sources and their effectiveness is likely to be limited, at least in the short to medium term. Individuals must be supported better, but this is hindered by lack of understanding of how sources of stress vary between different practice areas, lack of predictive power of assessment tools, and a lack of understanding of how personal and workplace factors interact. It was concluded that Stress intervention measures should focus on stress prevention for individuals as well as tackling organizational issues. Achieving this will require further comparative studies, and new tools to evaluate the intensity of individual distress.

**Yoga**

Chen KM and Tseng WS (2008): conducted Pilot-testing of the effects of a newly-developed silver yoga exercise program for female seniors. This study aimed to pilot-test the health promotion effects of a silver yoga exercise program for female seniors. Using a one-group, pre-posttest design, a convenience sample of 16 community-dwelling female seniors was recruited. The silver yoga exercise intervention was administered three times a week, 70 minutes per session, for four weeks. Data were collected at baseline and after completion of the four-week intervention. Results indicated that participants' body fat percentage and systolic blood pressure decreased, balance and range of motion on shoulder flexion and abduction improved, and sleep disturbance was minimized (all p < .05). Preliminary evidence supports that the silver yoga exercise program provides positive effects on the promotion of good health in female seniors living in the communities.
Galantine ML, Galbavy R, Quinn L (2008): Conducted a study was Therapeutic effects of yoga for children: a systematic review of the literature. The purpose of the study was completed a systematic review of the literature on the effect of yoga on quality of life and physical outcome measures in the pediatric population. We explored various databases and included case-control and pilot studies, cohort and randomized controlled trials that examined yoga as an exercise intervention for children. Summary of key points: Using the Saekett levels of evidence, this article reviews the literature on yoga as a complementary mind-body movement therapy. We address the research through three practice patterns according to the Guide to Physical Therapist Practice and provide considerations for the inclusion of yoga into clinical practice. Statement of conclusions and recommendations for clinical practice: The evidence shows physiological benefits of yoga for the pediatric population that may benefit children through the rehabilitation process, but larger clinical trials, including specific measures of quality of life are necessary to provide definitive evidence.

Ospina MB et.al., (2007): conducted a study on Meditation practices for health: state of the research. The objectives of the study was to review and synthesize the state of research on a variety of meditation practices, including: the specific meditation practices examined: the research designs employed and the conditions and outcomes examined; the efficacv and effectiveness of different meditation practices for the three most studied conditions; the role of effect modifiers on outcomes; and the effects of meditation on physiological and neuropsychological outcomes. Comprehensive searches were conducted in 17 electronic databases of medical and psychological literature up to September 20G5. Other sources of potentially relevant studies included hand searches, reference tracking, contact with experts, and gray literature searches. A Delphi method was used to develop a set of parameters to describe meditation practices, Included studies were comparative, on any
meditation practice, had more than 10 adult participants, provided quantitative
data on health-related outcomes, and published in English. Two independent
reviewers assessed study relevance, extracted the data and assessed the
methodological quality of the studies. Five broad categories of meditation
practices were identified (Mantra meditation, Mindfulness meditation, Yoga,
Tai Chi, and Qi Gong). Characterization of the universal or
supplemental components of meditation practices was precluded by the
theoretical and terminological heterogeneity among practices. Evidence on
the state of research in meditation practices was provided in 813
predominantly poor-quality studies. The three most studied
conditions were hypertension, other cardiovascular diseases, and substance
abuse. Sixty-five intervention studies examined the therapeutic effect of
meditation practices for these conditions. Meta-analyses based on low-quality
studies and small numbers of hypertensive participants showed that TM(R),
Qi Gong and Zen Buddhist meditation significantly reduced blood pressure.
Yoga helped reduce stress. Yoga was no better than Mind fumes-based Stress
Reduction at reducing anxiety in patients with cardiovascular diseases. No
results from substance abuse studies could be combined, "its role of effect
modifiers in meditation practices has been neglected in the scientific
literature. The physiological and neuropsychological effects of meditation
practices have been evaluated in 312 poor-quality studies. Meta-analyses of
results from 55 studies indicated that some meditation practices produced
significant changes in healthy participants. Many uncertainties surround the
practice of meditation. Scientific research on meditation practices does not
appear to have a common theoretical perspective and is characterized by poor
methodological quality. Firm conclusions on the effects of meditation
practices in healthcare cannot be drawn based on the available evidence.
Future research on meditation practices must be more rigorous in the design
and execution of studies and in the analysis and reporting of results.
Lynton H, Kligler B and Shiflett S (2007): Conducted a study on Yoga in stroke rehabilitation: a systematic review and results of a pilot study. The purpose was this article presented a systematic review of the literature pertaining to the use of yoga in stroke rehabilitation. In addition, we present the results of a small pilot study designed to explore the hypothesis that a Kundalini yoga practice of 12 weeks would lead to an improvement in aphasia as well as in fine motor coordination in stroke patients. Method: The 3 participants attended yoga classes twice a week for 12 weeks, before and after which they were tested on the O'Connor Tweezer Dexterity test, a timed test where the participant places pins in a Peg-Board with tweezers, and the Boston Aphasia Exam for speech. Results: All 3 participants showed improvement on both measures. Conclusion: The small sample size makes it impossible to draw definite conclusions, but the positive trends in this study suggest that farther research should be done to examine the effects of Kundalini yoga on specific illnesses or medical conditions.

Telles S, Naveen KV and Dash M, (2007): Conducted a study of Yoga reduces symptoms of distress in tsunami survivors in the Andaman Islands, A month after the December 2004 tsunami the effect of a 1 week yoga program was evaluated on self rated fear, anxiety, sadness and disturbed sleep in 47 survivors in the Andaman Islands. Polygraph recordings of the heart rate, breath rate and skin resistance were also made. Among the 47 people, 31 were settlers from the mainland (i.e. India, ML group) and 16 were endogenous people (EP group). There was a significant decrease in self rated fear, anxiety, sadness and disturbed sleep in both groups, and in the heart and breath rate in the ML group, and in the breath rate alone in the EP group, following yoga (P < 0.05, t-test). This suggests that yoga practice may be useful in the management of stress following a natural disaster in people with widely differing social, cultural and spiritual beliefs.

Aerobic Exercise
Norris, R, Carroll, and Cochrane R (1991): studied the effects of aerobic and anaerobic training on illness, blood pressure and psychological stress and well being. Male police officers were the subjects and they were assigned to either an aerobic or anaerobic training condition or to a no treatment control group. The training groups met three times per week for 45-minute sessions aimed at improving either cardiovascular endurance or muscle strength. Aerobic fitness level, heart rate, blood pressure and self report of stress and well being were measured prior to and following 10 weeks of training. Study found that subjects who had undergone aerobic training evinced larger changes on self-report measures of well being than the aerobic trainers and both groups showed significant improvement when compared to control group.

Perry (1988): compared an interval versus continuous aerobic dance programme on selected cardio respiratory variables. Volunteers were randomly assigned to an interval dance group, a continuous dance group, or control group. Following a graded exercise test on the cycle ergometer, ANCOVA and post hoc sheffee revealed significant improvements in VO2 max, VE max and oxygen pulse in the interval dance group. Both experimental groups showed significant decrease in adiposity and increase in anaerobic threshold. It was concluded that interval training may be a more effective substitute than traditional dance.

Williford (1988): studied the effects of aerobic dance training on serum lipids lipoproteins and cardio pulmonary function. Ten healthy, untrained females (Mean age 23 years) were evaluated to determine the effects of 10 weeks of aerobic dance training on plasma lipid and lipoprotein levels, cardio respiratory function and body composition. A control group of eight untrained females (mean age 26 years) underwent the same evaluation procedures as the training group. Tasting, blood samples, collected pre-and post- training, were assessed for tri-glycerides (TG), total cholesterol (TC).
high density lipoprotein cholesterol (HDLC). Maximal oxygen uptake (Vo2 max) and body composition were determined from a maximal treadmill test and hydrostatic weighing methods respectively. Triglyceride, TC, HDL-C, LDL - C, CHOL/ HDL-C. and LDL/HDL-C did not significantly change for either the control or experimental groups. Changes in the experimental group were significantly greater than in the control group for Vo2 max and time on a continuous.

Aggression

Traclet A, et.al., (2008): conducted a study on Aggressor and victim perspective-related differences in perceived legitimacy of aggression in soccer. The purpose of this role-playing study was to explore the perceived legitimacy of aggression in soccer as a function of perspective-related differences (aggressor v/s victim) and type of aggression (instrumental v/s hostile). 120 soccer players watched videotaped aggressive interactions in soccer and look the perspective of the actors (aggressor then victim or the reverse). Then they rated the legitimacy of each aggressive behavior depending on its ultimate goal (instrumental then hostile or the reverse). When participants adopted the aggressor perspective, they perceived instrumental aggression as more legitimate than hostile aggression. In contrast, when participants took the perspective of the victim, no significant difference was found regardless of the type of aggression. The discussion focused on implications and consequences of such divergences in aggressive sport situations.

Maxwell J. P. (2007): conducted a Study by on undergraduate students, the results of undergraduate students' ratings of 16 common sports based on their perceptions of the aggression in each sport. Unfortunately, it is unclear whether Pedersen's sample's perception of aggression actually reflects aggression of athletes who participate in these sports. Therefore, response of 1,441 British competitive athletes (817 men, mean age = 21.5, SD = 4.9) to a
short aggression questionnaire were analyzed to distinguish whether the same pattern of ranks reported by Pedersen could be replicated. In general, data were consistent with Pedersen’s rankings (Correlations were moderate to high), but some exceptions were evident, particularly for male athletes.

**Bekiari A., et.al., (2006):** conducted study of Verbal aggressiveness and stale anxiety of volleyball players and coaches. The purpose of the present study was to examine (he relation of verbal aggressiveness and state anxiety (somatic, cognitive, and self-confidence) in sports settings based on the ratings t-y volleyball coaches and their athletes. The sample consisted of volleyball athletes (n=208; 98 men and 110 women) and their coaches (n=20; 16 men and 4 women). Analysis showed that male volleyball players rated somatic anxiety higher and were more affected by the verbal aggressiveness of their coaches than female volleyball players. No mean differences were significant for male and female coaches on somatic or cognitive anxiety, self-confidence, or verbal aggressiveness. Also, correlation between subscale scores for male and female volleyball players and coaches was found. The correlations of verbal aggressiveness with self-confidence and anxiety were positive for these athletes, leading them to better behavior. This relationship needs further examination in sport settings.

**Self Confidence**

**Ferreira J. P. et.al., (2007):** did study of Pre-competitive anxiety and self-confidence in athletes with disability. This study examined the pre-competitive temporal patterning of competitive anxiety components in 42 athletes with disability who participated at the national level and at the national trials for the Paralympics Games in a variety of sports. All subjects completed a modified version of the Competitive Stale Anxiety Inventory-2 that measures intensity and direction of the competitive anxiety response on three occasions before competition (1 wk, 2 hr, and 20 min,). Analysis suggested that for cognitive and somatic dimensions athletes with
disabilities show a similar pre-competitive anxiety response to athletes without disability. However, there appear to be some differences, particularly in the intensity of self-confidence as athletes with disability reported a reduction of self-confidence just prior to competition,

**Rees T. and Freeman P. (2007):** conducted a study, the effects of perceived and received support on self-confidence. A sample of 222 university athletes (mean age 19.8 years, s = 2.0), ranging in standard from university second team to international competitor, completed a measure of perceived support 2 weeks before an important competition or match. On the day before the competition or match, the athletes completed measures of stressors, stress, received support, and self-confidence. Moderated hierarchical regression analyses revealed the following key findings: (i) main effects for both perceived (DellaR2 = 0.11) and received support (DeHaR2 = 0.14) upon self-confidence; (ii) stress-buffering effects for both perceived (DcltaR2 = 0.02) and received (DellaR2 = 0.07) support upon self-confidence, (iii) when both aspects of support were considered simultaneously, stress-buffering effects were primarily attributable to the influence of received support. These results demonstrate the beneficial impact of social support on self-confidence, both directly and by reducing the negative effect of stress on self-confidence. Our findings emphasize the need to recognize the distinction between perceived and received support, both in terms of theory and the design of social support interventions with athletes.

**Chamberlain and Hale (2007):** did a study of Competitive stale anxiety and self-confidence; intensity and direction as relative predictors of performance on a golf-putting task. This study considered relationships between the intensity and directional aspects of competitive state anxiety as measured by the modified Competitive Sport Anxiety Inventory-2(D) (Jones & Swain, 1992) in a sample of 12 experienced male golfers. Anxiety and performance scores from identical putting tasks performed under three
different anxiety-manipulated competitive conditions were used to assess both the predictions of Multidimensional Anxiety Theory (MAT; Martens et al., 1990) and the relative value of intensity and direction in explaining performance variance. A within-subjects regression analysis of the infra-individual data showed partial support for the three MAT hypotheses. Cognitive anxiety intensity demonstrated a negative linear relationship with performance; somatic anxiety intensity showed a curvilinear relationship with performance, and self-confidence intensity revealed a positive linear relation. Cognitive directional anxiety illustrated a positive linear relationship with putting performance. Multiple regression analyses indicated that direction (42% of variance) was a better predictor of performance than intensity (22%).

**Kamlesh (1983):** reported that self-confidence is a reflection of an athlete's own prior competition experience. Success strengthens confidence and failure retards it. Encouragement, sympathy from the Coach builds up self-confidence. The Athlete may be trained to "think positively" so as to gain confidence. The most important thing is that the athlete must learn to "believe" in himself and his abilities. Less experienced athletes are often less confident than the more experienced ones. One of the most striking aspects of elite competitors is their ability to learn from mistakes and errors. While self-confidence is an important attribute of successful performance, overconfidence keeps the athlete distant from victory.

**Self Esteem**

**Janie Tailor (2001):** conducted study on self-esteem leads and the results for Bohan and Rosenberg self-esteem scales indicated that the athletes who maintained their physical activity level (older athlete) had higher level of self-esteem than the athletes who did not maintain their physical activity level (older known athletes) Athlete's status interaction indicated that the young athletes and young non-athletes did not significantly differ on Rosenberg self-esteem scale.
(P>0.05). However, the older athletes had significantly higher Rosenberg self-esteem than did the older non athletes (P=0.05). In addition the young athletes had significantly lower self esteem than did the older athletes (P<Q.05), but the younger non-athletes and older non-athletes did not significantly differ from each other (P>0.05). The Age group x Athletes status interaction accounted for 9% of the variability in the Rosenberg self esteem scores.

**Marika and Samantha (2000):** investigated the relationship between amounts, of exercise, body satisfaction and self-esteem was completed by 252 participants. They were divided into four groups on the basis of gender and age, resulting in 70 young women, 48 young men, 73 mature women and 61 mature men. Significant negative relationship for the remainder of the whole sample, the first two of these reasons were associated with increased self-esteem. It was concluded that reasons for exercising did not provide an adequate explanation for the obtained difference in correlations across gender and age.

**Aro (1994):** conducted a study on self-esteem that low self-esteem has been implicated in most psychological dysfunction; however, low self-esteem is not necessarily the root cause of this dysfunction. It is believed that individuals with high. Self-esteem who may be predisposed to psychological disorders is better equipped to cope with these disorders and thus reduces the negative consequences that may result. Therefore, if self-esteem can be enhanced, the psychologies consequences of disorders can he reduced.